

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 8652

Petition of Green Mountain Power Corporation)
for approval to offer customers net-metering)
above the statutory cap pursuant to)
30 V.S.A. § 219a(h)(1)(A))

Order entered: 6/24/2016

**ORDER APPROVING PETITION AND ESTABLISHING PROCEDURES FOR THE ADMINISTRATION
OF GREEN MOUNTAIN POWER CORPORATION'S SUPPLEMENTAL NET-METERING PROGRAM**

This proceeding concerns a petition from Green Mountain Power Corporation (“GMP” or the “Company”) filed with the Vermont Public Service Board (the “Board”) seeking permission to raise its statutory net-metering cap to accommodate 7.5 MW of additional net-metering projects that have individual plant capacities of greater than 15 kW (the “GMP Supplemental Net-Metering Program” or the “Proposal”).¹ In today’s Order, we approve GMP’s Proposal, as modified by this Order.

I. BACKGROUND

On November 18, 2015, GMP filed the petition at issue in this proceeding.

On December 3, 2015, the Board issued an order requesting comments on what process the Board should use to review GMP’s petition.

On December 30, 2015, the Board held a prehearing conference.

On January 26, 2016, the Board issued a procedural order granting intervention to the Town of New Haven (“New Haven” or the “Town”), SunCommon, and Renewable Energy

1. See, 30 V.S.A. § 219a(h)(1)(A) (establishing cap on net metering capacity). The Board’s approval of the GMP Supplemental Net-Metering Program and adoption of the procedures contained in this Order do not affect the review or approval of net-metering projects with individual plant capacities of less than 15 kW that GMP has voluntarily accepted pursuant to 30 V.S.A. § 219a(h)(1)(A).

Vermont (“REV”) and requesting comments from REV and SunCommon as to the process to be used in this case .

On March 17, 2016, the Board issued a procedural order (the “March 17 Order”) that addressed certain procedural issues, directed GMP to provide additional information, and established a deadline of April 21, 2016, for substantive comments on GMP’s Proposal.

On March 31, 2016, GMP filed additional information in response to the March 17 Order.

Comments on GMP’s petition and its filing of March 31, 2016, were made by the Vermont Department of Public Service (the “Department”); New Haven; SunCommon; REV; Same Sun of Vermont, Ltd. (“Same Sun”); DC Energy Innovations, Inc. (“DC Energy”); Green Mountain Community Solar (“GMCS”); SunRaise; Integrated Solar Applications Corp. (“Integrated Solar”); Bill Marks; Johnson Controls; the Vermont Agency of Natural Resources (“ANR”); Troy Minerals, Inc.; and Lawes Agricultural Service, Inc. (“Lawes”).

On June 10, 2016, by letter, GMP requested that projects participating in the GMP Supplemental Net-Metering Program count towards any capacity pacing mechanism that may be adopted by the Board as part of the Board’s ongoing net-metering rulemaking proceeding.²

No other filings were received.

II. SUMMARY OF GMP’S PROPOSAL

GMP proposes to continue offering net-metering to customers beyond the 15 percent capacity cap prescribed in 30 V.S.A. § 219a(h)(1)(a).³ GMP proposes to make available up to 7.5 MW of capacity above the statutory cap for new net-metering systems that meet the following criteria:

2. This letter raises issues that are more appropriately addressed in the context of the Board’s rulemaking proceeding. Therefore, the Board has not ruled on GMP’s request in this Order.

3. 30 V.S.A. § 219a(h)(1)(a) provides, “An electric company: (A) Shall make net metering available to any customer using a net-metering system or group net-metering system on a first-come, first-served basis until the cumulative output capacity of net-metering systems equals 15 percent of the distribution company’s peak demand during 1996; or the peak demand during the most recent full calendar year, whichever is greater. However, after reaching this cap, an electric company may continue to accept solar net-metering systems of 15 kW or less without prior Board approval. For other net-metering systems, the Board may raise the 15 percent cap on petition of an electric company.”

1. The project must be less than or equal to 150 kW AC in capacity.
2. The host customer's consumption from the project must be projected to be at least (i) 2 percent of total project output or (ii) 50 percent of the owner's total consumption, whichever is less.
3. The hosting customer must be an active, pre-existing customer of GMP, as shown by a recent customer bill.
4. The project must be located on the hosting customer's property or on an adjacent, contiguous tax parcel that is owned by the hosting customer, as shown by a recent tax bill and/or property deed.

As discussed later in this Order, GMP also proposes a process by which projects would be found eligible to participate in the GMP Supplemental Net-Metering Program. This process consists of an application period, in which an applicant files attestation of compliance with the eligibility criteria set forth above. If the cumulative capacity of projects proposed by eligible applicants exceeds the additional 7.5 MW of capacity, a lottery would be conducted to select participants in the GMP Supplemental Net-Metering Program.

III. SUMMARY OF PARTICIPANTS' POSITIONS

GMP

GMP states that, considering the statutory criteria, good cause exists to approve the Proposal. GMP represents that both existing and above-cap net-metered projects impose a cost on the Company because "there is some lag time between when GMP begins compensating the customer for the system and when GMP realizes the avoided costs." GMP states that "the market values of energy and capacity purchases avoided by net-metered power are lower today than they are forecast to be in the future." Therefore, GMP believes that in the near term net-metering increases energy costs, but that over the long term the Company may receive benefits from net-metering because of distribution and transmission system cost savings.

GMP states that there are likely beneficial long-term rate impacts associated with existing net-metering projects on GMP's system because the solar adder that is paid for any particular

project expires after ten years, lowering the effective cost of net-metered power. However, GMP cautions that several factors can diminish that benefit, such as: lower wholesale energy prices that reduce the value of avoided energy, and increasing penetrations of solar projects that are shifting peaks to after sunset, thereby reducing capacity and transmission costs but also reducing the incremental value from additional distributed solar. GMP concludes that the limited number of new systems proposed for the GMP Supplemental Net-Metering Program are likely to have a neutral long-term impact on rates “on the order of 0.1 percent.”

GMP views existing net-metered systems located near load as beneficial to distribution and reliability because they tend to reduce distribution losses and help slow load growth. This, in turn, can improve reliability by reducing load-growth-driven constraints on the distribution system.

For above-cap systems, GMP states that whether a net-metering system causes costs or benefits depends on the size and location of the proposed system. GMP asserts that small systems (15 kW or less) tend to have no quantifiable cost or negative reliability impact because most small systems are located immediately adjacent to the load they serve. Larger projects are more problematic, according to GMP, because they require a more thorough evaluation prior to interconnection, and they tend to be located farther from load, thus reducing their benefit to the distribution system.

GMP contends that there are diversification benefits resulting from both existing net-metering systems and above-cap systems. GMP states that, once the 15 percent cap is reached, net-metered systems are expected to produce about 150,000 MWh per year (only 3.5 percent of GMP’s retail sales). However, GMP notes that the net-metering program is growing swiftly, and, on balance, GMP views net-metered solar power as a net diversification benefit.

GMP argues that “the environmental costs and benefits of existing net-metering systems [are] mixed in our view, in part, because the current net-metering program does not track the Renewable Energy Credits (RECs) of net-metering systems.” Further, GMP remarks that “[a]necdotal evidence suggests that smaller systems effectively retire RECs as there is no apparent aggregator facilitating the sale of such RECs on a large scale, suggesting the majority of the environmental benefits of such systems accrue to GMP’s customers.” Finally, GMP proposes

that, because the GMP Supplemental Net-Metering Program would focus on projects with a capacity of 150 kW or less that are located near load, the GMP Supplemental Net-Metering Program will “tip the environmental cost-benefit picture toward the benefits side.”

Department

The Department supports GMP’s Proposal.⁴ The Department observes that different stakeholders may desire alternative criteria than the ones proposed by GMP, but the Department finds GMP’s criteria to be reasonable.⁵ The Department argues that there is nothing in the statute that prohibits GMP from placing reasonable, nondiscriminatory conditions on a provisional, above-the-cap program and urges the Board to approve the Proposal.⁶

The Department agrees with ANR that greater clarity is needed concerning the proposed lottery process and supports ANR’s request to phase in the review of above-cap applications, lest the regulatory agencies be overwhelmed by new applications being filed all at once. Finally, the Department states that applications filed and approved under the GMP Supplemental Net-Metering Program should be subject to the Board’s current net-metering rules. All other applications should be rejected and re-submitted under the new net-metering rules when those rules take effect.⁷

ANR

ANR asks the Board to consider phasing in the review of the above-cap applications once the GMP lottery selects the projects that will go ahead. ANR argues that only with a phased-in approach will ANR, the Board, and the Department have the staff capacity to thoroughly review each of the projects.⁸

4. Department Comments, filed 4/21/16, at 2.

5. *Id.* at 3.

6. *Id.*

7. *Id.* Pursuant to Act 99 of 2014, the Board is required to adopt revised net-metering rules for effect on January 1, 2017.

8. ANR Comments, filed 4/14/16, at 1.

New Haven

The Town opposes the approval of the GMP Supplemental Net-Metering Program for several reasons. First, New Haven argues that GMP has provided insufficient information regarding the costs and benefits of net-metering systems that are already connected to the system and the environmental costs and benefits of net-metering generally, as required by 30 V.S.A. § 219a(h)(1)(A)(i)-(iii).⁹ Specifically, New Haven asserts that there is insufficient information about the effect of existing systems on open spaces and aesthetics, natural resources, system reliability, property values, and fire and safety hazards. Further, the Town states that a full cost-benefit analysis cannot be properly undertaken until all of the projects approved under the 15 percent cap have been built.¹⁰ Without this information, New Haven argues the Proposal should be denied.

New Haven reiterates its argument that the Board should be conducting this proceeding as a rulemaking. Despite that position, New Haven supports GMP's efforts to construct a program that encourages smaller projects sited closer to load. Should the Proposal be approved, the Town requests that the Board amend GMP's proposed eligibility criteria to require that the host customer's consumption from the project be equal to at least "20 percent of total project output."¹¹

Finally, should the Board approve the Proposal, the Town would support the lottery as long as no over-the-cap net-metered solar development is permitted in those distribution circuit areas designated on GMP's Solar Map as at "red" or "yellow" capacity.

REV

REV asks the Board to approve GMP's Proposal but without the lottery and siting criteria.¹² REV argues that the lottery aspect of the Proposal is unsound policy, conflicts with the "first-come, first-served" policy set forth in 30 V.S.A. § 219a(h)(1)(A), and undermines the

9. *Town of New Haven's Response to GMP's Filing of March 31*, Docket 8652, filed 4/21/16, at 1.

10. *Id.* at 2.

11. *Id.*

12. REV Comments, filed 4/21/16, at 2.

efforts of customers who prepared and invested in projects in a timely manner.¹³ REV further argues that the additional siting criteria in the Proposal “are inconsistent with Section 248(b) criteria regarding system stability and reliability as well as criteria addressing impacts to the natural environment, aesthetics and historic sites.”¹⁴ REV also states that limiting project sites based on the proposed criteria would effectively prohibit many people from participating in net-metering.¹⁵

Same Sun

Same Sun supports GMP’s ability to impose strategic criteria on projects that are accepted during this process but does not support the criteria setting the host customer consumption threshold at 2 percent of project output or 50 percent of total consumption because those levels seem too low to accomplish GMP’s stated goal of keeping generation closer to the load it serves.¹⁶ Same Sun also argues that the public good is better served by approving projects in which it is known up front where the generation is going and that the strongest case for approval is met by those projects where the host customer is using 100 percent of the power.¹⁷

Same Sun opposes the lottery process and disagrees that a lottery process is the fairest and most efficient manner in which to process above-cap applications. In particular, Same Sun disagrees with GMP’s claim that none of the applications GMP received during the period of 11/13/15 to 12/4/15 contained all of the information required under the new eligibility criteria. Same Sun claims that at least two of its applications were complete.¹⁸

13. *Id.* at 1.

14. *Id.* at 2.

15. *Id.*

16. Same Sun Comments, filed 4/13/16, at 1.

17. *Id.* at 2.

18. Same Sun Comments, filed 4/13/16, at 1.

Finally, Same Sun argues that its two applications should receive preferential treatment because 100 percent of the energy generated will be consumed at each site and each benefits a Vermont business or public school.¹⁹

DC Energy

DC Energy opposes the lottery system, arguing that the lottery would encourage developers and landowners to send in net-metering applications for projects that are not fully vetted, just to get a chance to build a project under the more favorable current rules in place.²⁰ DC Energy argues that this is not fair to fully vetted projects that were in development before the cap was reached. DC Energy asks the Board to limit GMP's review of projects to those that are already on the latest list of above-cap projects.²¹

GMCS

GMCS disagrees with GMP's assertion that "[n]ot one of the above the cap applications contained all of the information required in the eligibility criteria."²² GMCS asserts that its two applications on the list of above-cap projects included letters to the PSB, GMP, and ANR attesting that those two applications meet all four of the eligibility criteria.²³ GMCS asks that the only new requirement the Board should place on the "above-the-cap" applicant group is that they file a letter with the Board attesting to their project's conformance with the criteria.²⁴

GMCS also alleges that certain developers with privileged access to information enjoyed an unfair advantage in getting their projects to GMP prior to GMP reaching the cap. To level the playing field, GMCS recommends that the Board take all applications that were mailed and dated prior to the net-metering cap deadline and process their CPGs immediately.²⁵

19. *Id.*

20. E-mail from Ben Gordesky, DC Energy, to Judith C. Whitney, Clerk of the Board., sent on 4/12/16.

21. *Id.*

22. GMCS Comments, filed on 4/11/16, at 2, quoting GMP Letter, filed with the Board on 3/31/16.

23. *Id.* at 2.

24. *Id.*

25. *Id.* at 3.

Finally, if above-the-cap project approvals are delayed such that they are approved so late in 2016 that construction or commissioning is not complete until 2017, then GMCS asks the Board to ensure that the Board's net-metering rules that are in place in late 2015 continue to apply to those above-the-cap projects.²⁶

SunRaise

SunRaise supports the granting of GMP's petition to lift its net-metering cap above the 15 percent statutory cap and supports the four eligibility criteria proposed by GMP.²⁷

Integrated Solar

Integrated Solar objects to GMP's proposed criteria requiring a host to use 2 percent of total project output or 50 percent of the owner's total consumption, whichever is less. Integrated Solar observes that:

For a 150 kW project the forecasted production might be 188,000 kWh/year. If a project was located in the hinterlands of VT and the Host received 2 percent or 3,760 kwh (a modest amount) and the Owner received nothing (because it goes to other parties) then this criteria is met. This could be a farmland parcel far from the load. However, GMP has stated that this criteria is intended to meet its goal "to discourage large projects far from load..." Under this criteria 2 percent of the load could be used at the project site and 98 percent could be exported at an unlimited distance.²⁸

Integrated Solar concludes that the criteria seem to offer little value in directing projects to the load demand areas.

Bill Marks

Mr. Marks urges the Board to restrict all future large commercial solar projects located in rural or agricultural districts to those wherein the host customer's consumption is projected to be at least 50 percent of the total projected output. In the alternative, Mr. Marks asked the Board to

26. *Id.*

27. SunRaise Comments, filed on 4/14/16, at 1-2.

28. E-mail from Andrew R. Cay, President, to Judith C. Whitney, Clerk of the Board sent on 4/14/16.

continue to suspend consideration of all new applications until municipalities have had the option and opportunity to revise their Town Plans and Ordinances so that they may effectively control the siting and size of such arrays that do not serve the public good of this State.²⁹

Johnson Controls

Johnson Controls states that it has partnered with the Rutland Northeast Supervisory Union, which submitted an application on behalf of Otter Valley Union High School for a certificate of public good in January 2016. The application was subsequently rejected by GMP pending resolution of this docket.³⁰ Johnson Controls asserts that its proposed project is for a 150 kW roof-mounted solar array and that 100 percent of the energy generated by this installation will be consumed at the site. Johnson Controls asks that the Board give preference for approval of projects with these kinds of attributes.

Troy Minerals

Troy Minerals strongly disagrees with GMP's assertion that a lottery process is fair. Troy Minerals asserts that it submitted an application to GMP nearly five months ago for a 150 kW system that would supply 75 percent of the energy used at Troy Minerals' Wallingford plant (100 percent of the net-metering system's output), which is exactly the kind of project GMP claims it wants to encourage. Troy Minerals argues that it would be unfair to subject its project, and projects like it, to a lottery process.³¹

Lawes

Lawes disagrees with GMP's assertion that a lottery process is fair. Lawes asserts that it submitted an application to GMP on November 21, 2015, for a 55 kW roof-mounted solar system that will provide 100 percent of the energy for its facility in Brandon, Vermont, which is exactly

29. E-mail from Bill Marks to Jake Marren, Esq., sent on 4/14/16.

30. Johnson Controls Comments, filed on 4/14/16, at 1.

31. Troy Minerals Comments, filed on 4/14/16, at 1-2.

the kind of project GMP claims it wants to encourage. Lawes argues that it would be unfair to subject its project, and projects like it, to a lottery process.

IV. LEGAL BACKGROUND

Section 219a(h)(1)(A) of Title 30 provides:

An electric company: (A) Shall make net-metering available to any customer using a net-metering system or group net-metering system on a first-come, first-served basis until the cumulative output capacity of net-metering systems equals 15 percent of the distribution company's peak demand during 1996; or the peak demand during the most recent full calendar year, whichever is greater. However, after reaching this cap, an electric company may continue to accept solar net-metering systems of 15 kW or less without prior Board approval. For other net-metering systems, the Board may raise the 15 percent cap on petition of an electric company. In determining whether to raise the cap, the Board shall consider the following:

- (i) the costs and benefits of net-metering systems already connected to the system;
- (ii) the potential costs and benefits of exceeding the cap, including potential short- and long-term impacts on rates, distribution system costs and benefits, reliability, and diversification costs and benefits; and
- (iii) the environmental benefits and costs.

Therefore, the Board must determine whether to grant GMP's request to exceed the statutory net-metering cap, and in doing so, it must consider the criteria set forth in (i) through (iii).

V. DISCUSSION

The costs and benefits of net-metering systems already connected to the system

Because net-metering involves crediting electric customers for power generated by net-metering systems at prices above the retail rate for electricity, net metered power costs more than

traditional market or utility-owned resources on a dollars-per-kWh basis.³² These above-market costs weigh against expanding the net-metering program in its current form. However, GMP represents that even at the statutory cap, net-metering represents a “small percentage of GMP's portfolio of generation resources.”³³

On the other side of the ledger, net-metered power potentially offers benefits that may mitigate its above-market costs. GMP represents that net-metering systems may provide reliability benefits in certain situations. For example, net-metered solar power can coincide with a utility's peak consumption. When it does, net-metered power can help a utility potentially avoid capacity charges and transmission charges that the utility would otherwise incur if the utility had to obtain power from another source. Estimates of the value of net-metered power suggest that the benefits of net-metering can offset some of the costs.³⁴

Also, the comments received indicate that the current net-metering program has created jobs and that it has increased the supply of renewable energy in New England.³⁵ These benefits, though not easily quantified in dollar-per-kWh terms, also mitigate the costs of net-metering to some extent.

New Haven contends that it is not possible to accurately assess the costs and benefits of existing net-metering systems because “only a portion of the projects approved . . . [have] been built.” However, Section 219a(h)(1)(a) states that the Board must consider “the costs and benefits of net-metering systems *already connected to the system*.” We find that New Haven's criticism is misdirected because the statute requires the Board to consider the costs and benefits of net-metering systems “already connected” as opposed to “approved.”

32. Under the current net-metering statute, net-metering customers are credited either 19 or 20 cents per kWh and the utility does not necessarily obtain ownership of any RECs. *See generally*, 30 V.S.A. 219a (setting rates for net-metering in Vermont). In contrast, the Board has recently received bids for long-term contracts for solar power that range from approximately 7 to 11 cents per kWh, including ownership of RECs. *Programmatic Changes to the Standard-Offer Program*, Docket 7873, Order of 5/27/16 at 5.

33. Charlotte B. Ancel, Esq. GMP pf. at 11.

34. *See*, VERMONT DEPARTMENT OF PUBLIC SERVICE, EVALUATION OF NET METERING IN VERMONT CONDUCTED PURSUANT TO ACT 99 OF 2014 (2014) at Exh. 11. Available at: http://publicservice.vermont.gov/sites/dps/files/documents/Renewable_Energy/Net_Metering/Act%2099%20NM%20Study%20Revised%20v1.pdf.

35. *See, e.g.*, Comments of Green Mountain Community Solar, dated April 11, 2016, at 1.

On balance, while some participants have criticized the quality of the information provided by GMP concerning the costs and benefits of net-metering, no participant has persuasively argued that the costs of net-metering significantly outweigh its benefits or offered any specific information to support such a conclusion. Accordingly, our overall consideration of this criterion weighs in favor of approving the Proposal.

The potential costs and benefits of exceeding the cap, including potential short- and long-term impacts on rates, distribution system costs and benefits, reliability, and diversification costs and benefits

GMP observes that for the short term, rates are negatively affected by net-metering because the cost per kW of net-metered power is greater than that for power from other sources. However, GMP contends that over the long term there are likely beneficial rate impacts. GMP recognizes that the benefits of net-metering are dependent on the future costs of energy and capacity and depend on other factors that could change over time. Significantly, GMP represents that the limited number of new systems proposed for the GMP Supplemental Net-Metering Program are likely to have a neutral long-term impact on rates.

GMP represents that net-metering systems may improve the reliability of its distribution system. The distribution and reliability impacts tend to be more positive for net-metered systems that are smaller and closer to the load they serve. Accordingly, GMP's Proposal includes application criteria that are intended to ensure that only smaller net-metered systems that are close to load can participate in net-metering. Finally, GMP contends that net-metered solar power provides a net diversification benefit because the power comes from a number of small sources that are located in-state.

Several participants, including New Haven and Integrated Solar, recommended altering GMP's proposed criteria to require that a greater percentage of net-metered power be consumed on site. New Haven also recommends that the Board prohibit any above-cap net-metering systems from interconnecting with GMP's system where GMP has previously identified the circuit as "yellow" or "red" on GMP's solar map.

In response to the comments of New Haven and other participants, GMP has stated that the proposals for more stringent eligibility criteria were “reasonable” and that GMP would defer to the Board’s judgment as to whether to adopt them.³⁶

The Legislature established the parameters of net-metering as it is currently available in Vermont.³⁷ The Legislature determined it was appropriate to offer financial incentives to induce the growth of net-metering. These incentives included compensating net-metering customers at 19 or 20 cents per kWh.³⁸ The Legislature also sought to contain the costs of the net-metering program by establishing a 15 percent cap on the cumulative capacity of net-metering systems. The current incentives have led to exponential growth in the net-metering program, and in the past year many utilities have approached or exceeded the statutory capacity cap in their service territories. In this context, the Legislature has directed the Board to adopt new rules for the net-metering program that “account for all costs and benefits of net metering” and “to the extent feasible, ensure that net metering does not shift costs included in each retail electricity provider’s revenue requirement between net metering customers and other customers.”³⁹

GMP has proposed to accept 7.5 MW of net-metering projects that would be eligible to receive financial incentives that are more generous than the terms that the Board has proposed for new net-metering projects after January 1, 2017.⁴⁰ The Board’s proposed net-metering rule would, however, continue to offer comparable financial incentives to promote the construction of net-metering projects in locations where at least 50 percent of the project’s production will be consumed by the host customer or by a customer located on a contiguous parcel of land.⁴¹ In our opinion, the eligibility criteria proposed by GMP are not sufficiently stringent to ensure that net-

36. Letter from Shawn Enterline, on behalf of GMP, to Judith C. Whitney, Clerk of the Board, dated April 21, 2016, at 2.

37. *See generally*, 30 V.S.A. § 219a.

38. *Id.* at 219a (k)(i)(I).

39. 30 V.S.A. § 8010 (c).

40. *Compare Proposed Rule 5.100 Pertaining to Construction and Operation of Net-Metering Systems*, 16P0101, published March 10, 2016 at § 5.105 (proposing new rates based on beneficial siting criteria, including “on-site primary offtakers” effective January 1, 2017), and 30 V.S.A. § 219a (establishing a rate of 19 or 20 cents for net metering projects prior to January 1, 2017).

41. *Proposed Rule 5.100 Pertaining to Construction and Operation of Net-Metering Systems*, 16P0101, published March 10, 2016 at §§ 5.102 and 5.105.

metering systems would be located close to the load that they are serving and in areas that would not require significant improvements to the distribution grid. Given GMP's statement that it would defer to our judgment on this issue, it is appropriate to include eligibility criteria that are more consistent with the Board's policy vision for the net-metering program. Accordingly, we require that at least 50 percent of a project's production must be consumed by the host customer or by a customer located on a contiguous parcel of land. Additionally, as described in the procedures adopted below, projects whose output will be consumed entirely by the host customer will be given priority in the event that the cumulative capacity of eligible projects exceeds 7.5 MW. Finally, we conclude that projects must be located only in areas identified by GMP as "green" on GMP's solar map.⁴²

Subject to the more stringent eligibility criteria discussed above, our consideration of this criterion weighs in favor of approving the Proposal.

The environmental benefits and costs of net-metering

Net-metering systems generally do not create carbon emissions and have the potential to reduce the need for fossil-fuel-based generation. Accordingly, there is an environmental benefit from reduced carbon emissions associated with net-metering that accrues generally, though not specifically to Vermont in some cases, depending on the disposition of the RECs.

New Haven argues that GMP's analysis of this criterion is "conclusory" and that GMP has failed to present information addressing many environmental costs of net-metering, such as the effects of net-metering on open space and land use. However, pursuant to state law, all net-metering projects must be reviewed using the environmental criteria of Section 248, which requires, among other things, that the Board find that the construction of an electric generation facility does not have an undue adverse effect on the natural environment, with due consideration given to certain enumerated criteria.

The Board recognizes that net-metering projects, to the extent that they are not located on rooftops or other built environments, have the potential for some environmental impacts and that the cumulative impact of these projects is appropriately viewed as a cost that must be balanced

42. GMP's solar map can be found here: <http://www.greenmountainpower.com/innovative/solar/solar-map/>

against any climate benefits offered by net-metering. While New Haven asserts that environmental costs must be considered, New Haven did not provide any information that would enable us to conclude that the cumulative environmental costs associated with net-metering projects would significantly outweigh any environmental benefits. It is worth noting that ANR has participated in this case but has not taken the position that environmental impacts from net-metering have the potential to outweigh its benefits. Based upon the information presented in this proceeding, we conclude that our consideration of this criterion neither supports nor weighs against approval of the Proposal.

Lottery

Several participants oppose GMP's proposal to select applications for the GMP Supplemental Net-metering Program by lottery and argue that the Board should instead offer net-metering capacity to customers who have been planning their projects since last year. REV argues that a lottery process is contrary to the Legislature's intent to make net-metering available on a first-come, first-served basis.

Given the Board's decision to adopt the more stringent eligibility criteria discussed above, it is possible that a lottery will not be necessary because there will not be 7.5 MW of eligible applicants. However, in the event that the capacity of eligible applicants exceeds 7.5 MW, there must be an orderly process for selecting who may participate in GMP's Supplemental Net-Metering Program. The Board has considered the issues raised by the participants and while the Board recognizes that a lottery would afford an equal opportunity to all projects regardless of when they were proposed, the Board finds good cause to implement a lottery, if necessary.

Section 219a(h)(1)(A) of Title 30 requires that a utility make net-metering available on a "first-come, first-served basis *until*" the statutory cap has been reached. As described in the March 17 Order, we concluded that GMP is "permitted to condition the voluntary offer to raise its cap on such terms that the utility believes are needed to make a higher cap feasible within its service territory, subject to Board approval."⁴³ In the event that the volume of eligible applicants seeking to participate in the GMP Supplemental Net-Metering Program exceeds 7.5 MW, the

43. Docket 8652, Order of March 17, 2016 at 5.

Board finds that it will be most administratively efficient and fair to have a fresh start for the GMP Supplemental Net-Metering Program, where all of the procedures and requirements applicable to participation in the program are known at the outset. Therefore, as discussed further below, the Board will adopt procedures that include using a lottery in the event that the capacity of eligible applicants exceeds the 7.5 MW of capacity offered by GMP.

Above-the-Cap Net-Metering Applications Currently Pending Before the Board

On December 31, 2015, the Board suspended the regulatory review of net-metering applications that had not reserved capacity within the statutory cap. Because the Board has decided to approve GMP's Proposal, which includes additional eligibility criteria for net-metering applications, the Board has determined that it is most administratively efficient to dismiss all suspended applications without prejudice to refile using the procedures described below. An order providing individual notice of dismissal will be issued to inform each applicant of the procedures for participating in the GMP Supplemental Net-Metering Program.

VI. CONCLUSION

Based upon our consideration of the statutorily required criteria, we hereby approve GMP's Proposal as discussed in this Order. Accordingly, the Board hereby adopts the following procedures to implement the GMP Supplemental Net-Metering Program.

PROCEDURES FOR THE ADMINISTRATION OF THE GMP SUPPLEMENTAL NET-METERING PROGRAM

Purpose and Applicability

The purpose of these procedures is to implement Green Mountain Power Corporation's Supplemental Net-Metering Program, pursuant to 30 V.S.A. §§ 209(a)(3) and 219a(a)(1)(H) and 3 V.S.A. § 835. These procedures are applicable to the qualification and selection of up to 7.5 MW of capacity of net-metering systems for participation in the GMP Supplemental Net-Metering Program.

Qualification Window⁴⁴

1. The qualification window shall open 10 business days after issuance of this Order.
2. This Order and the dates of the qualification window shall be posted on GMP's website. GMP shall make reasonable efforts to provide prompt notice via e-mail of the qualification window to all applicants for net-metering projects in GMP's interconnection queue.
3. The qualification window shall remain open until 5:00 PM on the 10th business day after the qualification window is opened. No applications may be submitted after the qualification window closes.
4. Applications shall only be submitted via e-mail at dr@greenmountainpower.com.

Attestation that the Above-Cap Project Meets the Eligibility Criteria

1. Applications shall be accompanied by an Attestation on a form provided by GMP certifying that the following criteria have been met:
 - i. The project is less than or equal to 150 kW AC in capacity.
 - ii. The host customer's consumption from the project is projected to be at least 50 percent of the project's output.
 - iii. The host customer is an active, pre-existing customer of GMP, as shown by a recent customer bill.
 - iv. The project is located on the host customer's property or on an adjacent, contiguous tax parcel that is owned by the host customer, as shown by a recent property tax bill and/or property deed.
 - v. The Project is located on a circuit that is labeled "green" on GMP's Solar Map, which is available at:
<http://www.greenmountainpower.com/innovative/solar/solar-map/>.

44. GMP termed this procedural step as the "application window." We have renamed this the "qualification window" to clarify that this process is intended to identify qualified applicants and to differentiate this step from the filing of a complete application with the Board for a certificate of public good.

Application Qualification

1. GMP shall review applications for completeness and the attestation for compliance with the eligibility criteria.
2. Incomplete applications shall be rejected, and GMP shall make reasonable efforts to inform the applicant via e-mail. Incomplete applications may be cured by resubmitting a complete application to GMP within the 10 business-day qualification window. No other opportunity to cure incomplete applications shall be allowed.
3. After the qualification window has closed, GMP shall add up the cumulative capacity of all eligible applicants and create a qualified application list. GMP shall give priority to applications where 100 percent of the project's output will be consumed by the host customer. If the cumulative capacity of projects whose output will be entirely consumed by the host customer exceeds 7.5 MW, those projects will be entered in the lottery process described below and no other projects will be entered in the lottery. If the cumulative capacity of projects whose output will be entirely consumed by the host customer does not exceed 7.5 MW, but the cumulative capacity of all eligible projects does exceed 7.5 MW, GMP shall automatically accept all projects whose output will be consumed entirely by the host customer and enter all other eligible applicants in the lottery process described below. If the cumulative capacity of all eligible applicants is less than or equal to 7.5 MW, GMP shall not conduct a lottery and shall instead notify all eligible applicants that they have been accepted into GMP's Supplemental Net Metering Program.

Lottery

1. If the total capacity of qualified applications exceeds 7.5 MW, GMP shall publish a notice on its website that includes the locations, date, and time of the lottery. GMP shall conduct the lottery in a public location. GMP shall provide a copy of the notice to the Board and Department as soon as practicable.

2. In the presence of Department staff, GMP shall randomly select 7.5 MW from the qualified application list using the random number generator function in Microsoft Excel.
 - i. A random number shall be generated for each applicant.
 - ii. The qualified applications shall be sorted from lowest to highest number.
 - iii. Projects shall be selected based on the lowest random numbers in the list until 7.5 MW of applications are selected.
 - iv. If the last project selected exceeds the 7.5 MW capacity cap, it shall be accepted.

Publishing Accepted Qualified Applications

1. As soon as practicable, GMP shall publish a full list of the applications that were received and indicate which applications were accepted into the GMP Supplemental Net-Metering Program.

Filing of Applications for a Certificate of Public Good ("CPG")

1. CPG applications for projects accepted to participate in the GMP Supplemental Net-Metering Program may be filed with the Board only after GMP has published the list of accepted qualified applicants.
2. In addition to filing the required CPG application form and any other required information, the applicant shall certify that it was accepted by GMP into the GMP Supplemental Net-Metering Program.
3. Upon request, the Board will grant reasonable requests for extensions of time to any person who is required to review or entitled to file comments on multiple net-metering CPG applications.

VII. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the State of Vermont Public Service Board that:

1. Green Mountain Power Corporation's petition for permission to accept 7.5 MW of capacity in net-metering applications above the 15 percent net-metering cap established by 30 V.S.A. § 219a(h)(1)(A) ("the GMP Supplemental Net-Metering Program") is hereby approved, subject to the discussion in this Order.
2. The procedures for the administration of the GMP Supplemental Net-Metering Program set forth in this Order are hereby adopted.

Dated at Montpelier, Vermont, this 24th day of June, 2016.

<u>s/James Volz</u>)	
)	
)	PUBLIC SERVICE
<u>s/Margaret Cheney</u>)	
)	BOARD
)	
<u>s/Sarah Hofmann</u>)	OF VERMONT

OFFICE OF THE CLERK

FILED: June 24, 2016

ATTEST: s/Judith C. Whitney
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal would not stay the effect of this Order, absent further order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and Order.